P 5/13/2008

Municipality/Organization: **Massachusetts Department of Correction**
North Central Correctional Center (NCCI)

EPA NPDES Permit Number: **MAR 042007**

MADEP Transmittal Number: **W- 041202**

Annual Report Number & Reporting Period: April 1, 2007 – March 31, 2008

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

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Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: Jeffrey J. Quick

Printed Name: Jeffrey J Quick, A.I.A.

Title: Director, Division of Resource Management

Date: 5/09/2008

Part II. Self-Assessment

The Department of Correction (DOC) received correspondence from the Environmental Protection Agency (EPA) on May 28, 2004 determining the Notice of Intent (NOI) submission was administratively complete. From the time the NOI's were prepared and before they were submitted the DOC began a prioritization list of areas for investigation including but not limited to:

- **Entry Points into the storm drainage system(s) maintained by the DOC.**
- **Documentation of discharges points on and off the DOC property.**
- **Coordination with Town(s) that are also MS4s**
- **Illicit connections identification (None were found).**
- **Investigation of infrastructure and identification of problem drainage areas.**

Through the State of Massachusetts Clean State Program, NCCI had an oil-water separator (OWS) installed to handle parking lot drainage three years before the Phase II program required a NOI to be submitted. Each DOC operation was critically evaluated to determine what repairs were necessary. In summary, the storm drainage systems operated by the DOC at Gardner are not combined systems where sewer and storm water is discharged. The OWS is inspected approximately every six months and is cleaned as necessary.

The DOC has held numerous training sessions with the DOC executive board, the Directors of Engineering and Environmental Health and Safety Staff. Training will continue through the summer and in the later part of the current fiscal year and next fiscal year as funding becomes available. Training included an introduction of the program, the importance of the program and goals that were set for the first 5 years of the permit program. Ongoing and informal training has continued more so on a case by case basis.

A few of the fourth year milestones and goals have been met - others are still in progress. The major accomplishment is that the storm drains are being systematically cleaned. One major repair was made to a drain line on the facility grounds and during 2007, the City of Gardner repaired a drain line under the facilities access road. Minor repairs are such as patching asphalt, and fixing catch basin rims are required and are expected to be addressed as funding becomes available. Other than the two projects mentioned above there were no major repairs made during the last permit year.

Part III. Summary of Minimum Control Measures

1. Public Education and Outreach

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year New
1	Publicize/Present SW Program to staff	Div. of Res. Management	Publicize and Present Program to	Conduct facility specific training with maintenance staff and other stakeholders in this program.	Continue with training on a case by case and as funding is identified.
Revised No					
2	Distribute Printed Materials	Div. of Res. Management	Create and Post Material	Provide written updates and progress reports to management staff.	Provide written updates and progress reports to management staff
Revised No					
3	Intranet Posting	Div. of Res. Management	Post Materials	Completed separate Intranet page.. In addition, a newsletter that highlighted the Stormwater Phase II program was completed and distributed.	Periodic updates as needed.
Revised Yes/New	Preparation of Newsletter				
4	Stenciling	Div. of Res. Management	Complete stenciling	Stenciling was limited due to security concerns.	Maintenance is required but concerns have been raised about security.
Revised No					
Revised					
Revised					

1a. Additions

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year New
5	Form Stormwater Committee	Div. of Res. Management	Form Committee	Formed Stormwater Committee that is part of the DOC's State Sustainability Council	Committee needs to meet every three months
Revised No					
6	Staff input	Div. of Res. Management	Solicit Input and Implement Ideas	Input has been received. Investigation and some locations prioritized. Repairs are necessary.	Continue with staff education
Revised No					
Revised					
Revised					
Revised					
Revised					

2a. Additions

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year New
7	Map Drain System	Div. of Res. Management	Complete Mapping	Mapping completed.	Annual inspections and update as needed.
Revised					
8	Dry/Wet Weather Surveys	Div. of Res. Management	Document and Prioritize	Storm drains require minor repairs. Funding limited ability to make any repairs. Minor paving repairs completed. One section of drain line replaced	Prioritize those catch basins that require repairs.
Revised					
9	Correct Problems	Div. of Res. Management	Make Repairs and Document	Repair to drain line completed.	Pending budget catch basin and piping repairs as needed
Revised					
10	Policy for Enforcement	Div. of Res. Management	Prepare Policy	Stormwater Committee to be charged with preparation of policy. Policy in place that ties in sustainable practices with this BMP.	Update policy as needed. Review for improvements.
Revised					
Revised					
Revised					

3a. Additions

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year New
11	Construction Management	Div. of Res. Management	As Necessary	**No Activity**	**None Planned**
Revised					
Revised					
Revised					
Revised					
Revised					
Revised					

4a. Additions

5. Post-Construction Stormwater Management in New Development and Redevelopment

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year New
12	Post Construction Activities	Div. of Res. Management	As Required	**No Activity**	**None Planned**
Revised					
Revised					
Revised					
Revised					
Revised					
Revised					

5a. Additions

6. Pollution Prevention and Good Housekeeping in Municipal Operations

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year New
13	Develop O&M Plan	Div. of Res. Management		Worked on plan that has catch basins cleaned every 12 to 18 months.	Continue with evaluation of program funding is limited
Revised					
14	Execute O&M Plan	Div. of Res. Management		Limited funding did not allow all work to be completed, although some major maintenance and improvements made.	Review and Execute O&M Plan
Revised					
15	Long Term Planning	Div. of Res. Management		Evaluated what is needed to implement O&M plan.	Modify as necessary
Revised					
Revised					
Revised					
Revised					

6a. Additions

7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA) *<<if applicable>>*

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year New
	NA				
Revised					
Revised					
Revised					
Revised					
Revised					
Revised					

7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

At the NCCI, the locations of the drain lines and outfalls have been identified. The last year has been spent implementing a periodic inspection program. One section of a drain line was replaced since it had collapsed and caused flooding on the facility grounds. In summary, the DOC has a very good understanding of the drainage system. Some improvements completed this year were repairs to a few catch basins were made and repair of a drain line near the loading dock. Catch basins were inspected and some were cleaned (although limited) due to budget issues. The coming year will require new efforts for catch basin cleaning, repairs and other drain maintenance. Currently, inmate labor is used to pick-up litter and other roadside debris.

Of note the NCCI Facility constructed a sand and salt shed in 2001. Due to the hard winter and heavy snow fall.

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed	YES	Staff by DRM
Annual program budget/expenditures	($)	

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	100%	DOC Staff only
Stormwater management committee established	Yes	
Stream teams established or supported	No	
Shoreline clean-up participation or quantity of shoreline miles cleaned	NA	
Household Hazardous Waste Collection Days	NA	
▪ days sponsored	No	
▪ community participation	N/A	
▪ material collected	(tons or gal)	
School curricula implemented	NA	
Recycling efforts	1200 tons	

Legal/Regulatory

	In Place Prior to Phase II	Under Review	Drafted	Adopted
Regulatory Mechanism Status (indicate with "**X**")				
▪ Illicit Discharge Detection & Elimination				
▪ Erosion & Sediment Control	X			
▪ Post-Development Stormwater Management				
Accompanying Regulation Status (indicate with "**X**")				
▪ Illicit Discharge Detection & Elimination		X		X
▪ Erosion & Sediment Control		X	X	X
▪ Post-Development Stormwater Management		X		X

Mapping and Illicit Discharges

Outfall mapping complete	100%	
Estimated or actual number of outfalls	Six (6)	One to stream and 5 to veg. swales
System-Wide mapping complete	(100%)	
Mapping method(s)		
▪ Paper/Mylar	100 %	
▪ CADD	10%	
▪ GIS	0 %	Need to purchase software in 09
Outfalls inspected/screened	100 %	
Illicit discharges identified	Zero (0)	
Illicit connections removed	NA	
% of population on sewer	(100 %)	
% of population on septic systems	(0%)	

Construction

Number of construction starts (>1-acre)	None	
Estimated percentage of construction starts adequately regulated for erosion and sediment control	NA	
Site inspections completed	NA	
Tickets/Stop work orders issued	NA	
Fines collected	NA	
Complaints/concerns received from public	None	

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	NA – 0%	
Site inspections completed	NA	
Estimated volume of stormwater recharged	NA	

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	1 time / year	In permit yr. 4
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	NA	
Total number of structures cleaned	5	8
Storm drain cleaned	2	4
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	3 cy
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		X
Cost of screenings disposal	($)	$4000.00

Average frequency of street sweeping (non-commercial/non-arterial streets)	NA	
Average frequency of street sweeping (commercial/arterial or other critical streets)	0/yr contract	
Qty. of sand/debris collected by sweeping	(lbs. or tons)	
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	
Cost of sweepings disposal	($)	
Vacuum street sweepers purchased/leased	Contracted Services	
Vacuum street sweepers specified in contracts	No	No

Reduction in application on public land of: ("N/A" = never used; "100%" = elimination)		
▪ Fertilizers	NA	NA
▪ Herbicides	NA	NA
▪ Pesticides	NA	NA

Anti-/De-Icing products and ratios	10% NaCl 0% $CaCl_2$ 0% $MgCl_2$ 0% CMA 0% Kac 0% KCl 90% Sand	
Pre-wetting techniques utilized	-	
Manual control spreaders used	-	
Automatic or Zero-velocity spreaders used	-	
Estimated net reduction in typical year salt application	TBD	
Salt pile(s) covered in storage shed(s)	Yes	Yes
Storage shed(s) in design or under construction	NA	NA